BEGINNER LEVEL:

Excel & Spreadsheets:

- 1. Microsoft Excel Essentials: https://edu.gcfglobal.org/en/excel/
- 2. Google Sheets Training:
 https://www.googleapps.com/learning-center/products/sheets/get-started/

Python Basics:

- 1. Python for Everybody Specialization: https://www.py4e.com/lessons
- 2. Automate the Boring Stuff: https://automatetheboringstuff.com/
- 3. Real Python Tutorials: https://realpython.com/tutorials/all/

SQL Fundamentals:

- 1. SQLBolt Interactive Lessons: https://sqlbolt.com/
- 2. PostgreSQL Exercises: https://pgexercises.com/
- 3. SQL Murder Mystery (fun learning): https://mystery.knightlab.com/

INTERMEDIATE LEVEL:

Data Analysis Libraries:

- 1. Pandas Tutorial: https://pandastuide.readthedocs.io/en/latest/
- 2. NumPy User Guide: https://numpy.org/doc/stable/user/absolute_beginners.html
- 3. Matplotlib Gallery: https://matplotlib.org/stable/gallery/index.html

Statistics & Visualization:

- 1. StatQuest Blog: https://statquest.org/video-index/
- 2. Seaborn Gallery: https://seaborn.pydata.org/examples/index.html
- 3. Plotly Examples: https://plotly.com/python/

Practice Projects:

1. DrivenData Competitions: https://www.drivendata.org/competitions/

- 2. Kaggle Learn Projects: https://www.kaggle.com/learn/overview
- 3. DataCamp Projects (some free): https://www.datacamp.com/projects

ADVANCED RESOURCES:

Machine Learning:

- 1. Fast.ai Practical Deep Learning: https://course.fast.ai/
- 2. Google Machine Learning Crash Course: https://developers.google.com/machine-learning/crash-course

Big Data Tools:

- 1. Apache Spark Tutorial: https://spark.apache.org/docs/latest/quick-start.html
- 2. Hadoop Tutorial:
 https://hadoop.apache.org/docs/current/hadoop-project-dist/hadoop-common/SingleCluster.html

PRACTICE DATASETS:

- 1. AWS Open Data Registry: https://registry.opendata.aws/
- 2. World Bank Open Data: https://data.worldbank.org/
- 3. Google Earth Engine Datasets: https://developers.google.com/earth-engine/datasets

COMMUNITY RESOURCES:

- 1. Data Science Stack Exchange: https://datascience.stackexchange.com/
- 2. PyData Community: https://pydata.org/
- 3. R-Bloggers: https://www.r-bloggers.com/

DOCUMENTATION & CHEAT SHEETS:

- 1. Scipy Lecture Notes: https://scipy-lectures.org/
- 2. Data Science Cheat Sheets: https://www.datacamp.com/cheat-sheet
- 3. Git Cheat Sheet: https://education.github.com/git-cheat-sheet-education.pdf

These resources should give you a solid foundation. Remember to:

- Start with the basics and gradually move to more complex topics
- Practice regularly with real datasets
- Join communities to learn from others
- Build a portfolio as you learn